

REMARKS

Applicant respectfully requests reconsideration in view of the foregoing amendments and the following remarks.

Claim Status

Claims 1, 5, 7-36, 40, 42-71, 75 and 77-106 are pending in this application and have been subjected to restriction and election of species. Claims 32, 40 and 67 are herein amended to correct minor inadvertent informalities. No new matter has been added.

An Office Action on the merits was issued on May 5, 2004 in response to which, Applicant filed an Amendment and Request for Reconsideration on October 8, 2004. The outstanding Restriction Requirement, responded to herein, was issued in response the October 8, 2004 filing.

In the October 8, 2004 Amendment, Applicant canceled, *inter alia*, claim 41. However, due to an inadvertent typographical error on page 3 of that filing, claim 31 was incorrectly stated in the introductory paragraph as having been canceled. It is, however, correctly reflected in the listing of claims that claim 31, as originally presented, was and is intended to remain pending, with claim 41 being canceled. It is apparent that the Examiner has recognized this inadvertent error and canceled claim 41 while keeping 31 pending. Applicant simply wished to clarify the record as to the status of these claims.

Argument

The Examiner has subjected pending claims 1, 5, 7-36 40, 42-71, 75 and 77-106 to restriction under 35 U.S.C. §121 because, in the Examiner's opinion, as set forth in the Detailed Action, the application contains claims directed to three patentably distinct inventions as follows:

Serial No. 09/883,467

Group I: claims 7-32, 42-67, 77-102 and 106 drawn to image segmentation, classified in class 382, subclass 173;

Group II: claims 33-35, 68-70 and 103-105 drawn to detection of the boundaries of an image, classified in class 382, subclass 256; and

Group III: claims 1, 5, 36, 40, 71 and 75 drawn to image edge correction, classified in class 382, subclass 266.

It is the Examiner's opinion that the inventions are related as sub-combinations disclosed as usable together in a single combination. The Examiner has determined that each invention is distinct from the others as they are separately usable.

The Examiner has further indicated that, in the event Group I is elected, a further election of one of six(6) species identified by the Examiner is required. (See pages 2-3 of the Office Action.) In the Examiner's opinion, the species and claims are identified as follows:

Species 1- first embodiment of the invention (with reference to paragraph [0073] of the specification) and claims 10-13, 45-48 and 80-83 directed thereto;

Species 2- second embodiment of the invention (with reference to paragraph [0079] of the specification) and claims 14-17, 49-52 and 84-87 directed thereto;

Species 3- third embodiment of the invention (with reference to paragraph [0088] of the specification) and claims 18-21, 53-56 and 88-91 directed thereto;

Species 4- fourth embodiment of the invention (with reference to paragraph [0097] of the specification) and claims 22-25, 57-60 and 92-95 directed thereto;

Species 5- sixth embodiment of the invention (with reference to paragraph [0112] of the specification) and claims 26-28, 61-63 and 96-98 directed thereto; and

Species 6- seventh embodiment of the invention (with reference to paragraph [0119] of the specification) and claims 29-31, 64-66 and 99-101 directed thereto.

In addition, the Examiner has determined claims 7-9, 32, 42-44, 67, 77-79, 102 and 106 to be generic to these 6 species.

Applicant would like to draw the Examiner's attention to the identified fourth embodiment corresponding to Species 4. Applicant disagrees with the Examiner's characterization of the fourth embodiment of the invention. Specifically, the Examiner states that "the threshold value is calculated by subtracting a predetermined value from a maximum gray level." (emphasis added)(See page 3, lines 4-5 of the Office Action.) Applicant respectfully points out that this statement is incorrect. With reference to paragraph [0097] of the specification, the threshold value is calculated by subtracting a predetermined value from an average gray level: (emphasis added)

[0097] The fourth embodiment determines a threshold value using an average gray level unlike in the first to third embodiments. Since the operations are the same as those in the first to third embodiments except for the threshold value determination method, a description thereof will be omitted. The threshold value determination operation will be described below.

As stated above, Applicant provisionally elects Group I including claims 7-32, 42-67, 77-102 and 106 of which the Examiner has indicated claims 7-9, 32, 42-44, 67, 77-79, 102 and 106 to be generic to these 6 species. In addition, Applicant elects Species 4 (reading on claims 22-25, 57-60 and 92-95) for prosecution.

Should any generic claim be deemed allowable, Applicant respectfully requests that all species readable thereon be rejoined to the case.

Applicant disagrees with the restriction requirement imposed by the Examiner and thus make the above elections with traverse.

For the reasons stated in the Office Action, it is the Examiner's position that restriction for examination purposes as indicated is proper because the inventions are distinct and have acquired a separate status in the art as shown by the identified different classifications.

According to M.P.E.P. §803, there are two criteria for a proper requirement for restriction between patentably distinct inventions:

- (1) The inventions must be independent or distinct as claimed; **and**
- (2) There must be serious burden on the examiner if restriction is not required.

Applicant respectfully submits that (1) all groups of restricted claims are properly presented in the same application; (2) undue diverse searching would not be required; and (3) all claims should be examined together.

First, the Examiner has not shown that examination of all the pending claims would require undue searching and/or place a serious burden on the Examiner, which is the requisite showing for proper issuance of a restriction requirement.

In fact, the searching for Groups I, II and III has already been performed as a first Office Action on the merits was already issued on May 5, 2004 in which independent claims 1-106 were examined and rejected in view of prior art. It is respectfully submitted that it would not be unduly burdensome for the Examiner to, at most, update the search already performed in the identified classifications to examine all three groups of inventions in view of the October 8, 2004 filing because the initial search of these same three groups has already been carried out. In all likelihood, no additional search would even be required as the Examiner would have presumably performed a comprehensive search in preparation of the May 5 Office Action.

For example, as originally presented, claims 32 and 33 were dependent upon claim 1. These claims were examined together and rejected for the reasons set forth in the May 5

Office Action. In the Amendment filed on October 8, 2004 in response to that May 5 Office Action, claims 32 and 33 were amended to be independent in form. Now claims 1, 32 and 33 have been classified as three distinct inventions, yet the searching for these claims has already been performed. Several other claims are similarly situated.

Applicant respectfully traverses the requirement for restriction at least on the grounds that examining all of the identified groups would not be unduly burdensome, would likely pose no additional burden on the Examiner, and, in fact, would be necessary to ensure a complete search for a proper examination on the merits of the pending claims.

Accordingly, Applicant respectfully submits that the Requirement for Restriction is improper for at least the reasons stated, and request that the Restriction Requirement be withdrawn and all presented claims be examined on the merits.

Applicant respectfully requests reconsideration of all claims based on the amendments and arguments presented in Applicant's October 8, 2004 filing.

CONCLUSION

In view of the foregoing, Applicant respectfully submits that claims 1, 5, 7-36, 40, 42-71, 75 and 77-106 as listed herein are properly presented in this application and, for reasons stated in the October 8, 2004 filing, are allowable over the art of record, taken alone or in combination. Applicant further submits that this application is hereby placed in condition for allowance which action is respectfully requested.

No fees are believed due in connection with this response and this paper is believed to be timely filed. However, should an extension of time be necessary, such extension is hereby petitioned. The Commissioner is authorized to charge any fees or credit any

Serial No. 09/883,467

overpayments which may be required for this paper to Deposit Account Number 13-4500, Order No. 1232-4724.


In the event that a telephone conference would facilitate prosecution, the Examiner is invited to contact the undersigned at the number provided.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: March 23, 2005

By:



Stephen J. Manetta
Registration No. 40,426

Mailing address:
MORGAN & FINNEGAN, L.L.P.
3 World Financial Center
New York, New York 10281-2101
(212) 415-8700 (Telephone)/(212) 415-8701 (Facsimile)